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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,254	08/17/2001	Takashi Nishikado	500.40508X00	1488

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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 DIAGONAL ROAD  
SUITE 370  
ALEXANDRIA, VA 22314

EXAMINER
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GARG, YOGESH C

ART UNIT	PAPER NUMBER
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3625

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/931,254

Applicant(s)

NISHIKADO ET AL.

Examiner

Yogesh C. Garg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/8/2006 has been entered.

***Response to Amendment***

2. Applicant's amendment received on 5/8/2006 is acknowledged and entered. All previously filed claims 1-19 are canceled. New claims 20-30 have been added. Currently claims 20-30 are pending for examination.

***Response to Arguments***

3 Applicant's arguments with respect to new claims 21-30 filed on 5/8/2006 have been considered but are moot in view of the new ground(s) of rejection necessitated due to filing of new claims. This is a Non-Final rejection.

***Claim Rejections - 35 USC § 102***

4 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.1. Claims 20-23, 27 and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Crow et al., hereinafter Crow (US Patent 6,442,651 B2).

**Regarding claim 20**, Crow discloses a data processing method in a service system including a server apparatus, a client apparatus and a data processing relay apparatus for relaying data between the server apparatus and the client apparatus (see Figs.1 &2) , comprising:

a first step of providing the data processing relay apparatus with a data processing unit for processing data in accordance with a data processing instruction which indicates how to process the data (see Fig.1. Reference number "110", the cache corresponds to the claimed data processing relay apparatus and it includes a data processing unit , "111" the processor for processing data in accordance with a data processing instruction which indicates how to process the data);

a second step of receiving a data request from the client apparatus to the server apparatus by the data processing relay apparatus (see at least col.5, lines 8-29 wherein a client requests data in the form of a web document from a server "130" by the data processing relay apparatus, that is "110"-cache) ;

a third step of sending the received data request to the server apparatus by the data processing relay apparatus (see at least col.5, lines 24-29 and step 224 in Fig.2);

a fourth step of receiving, by the data processing relay apparatus, an extended data, which the server apparatus sends to the data processing relay apparatus in response to the data request, including the data requested in the data request and data processing control information including at least one the data processing instruction indicating how to process the

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data (see at least col.5, lines 24-29 and step 224 in Fig.2. Note: Cache, 110 receives a web document 133 from the server "130" in response to the request from client via cache. The data sent from the server and received by the cache is an extended data which includes the data requested and data processing control information including instructions as how to process data, see col.3, lines 49-63. The web document 133 includes both the requested document by the client plus text and directions for display and embodied object 134 which correspond to data processing control information including at least one the data processing instruction indicating how to process the data) ;

a fifth step of storing the received extended data by the data processing relay apparatus (col.5, lines 27-29, "...The cache 110 stores the web document 133....");

a sixth step of extracting the data processing instruction from the data processing control information included in the extended data by the data processing unit of the data processing relay apparatus; a seventh step of processing the received data in accordance with the extracted data processing instruction by the data processing unit; a eighth step of repeating the sixth step and the seventh step until completing to process in according to all data processing instructions in the data processing control information by the data processing unit ; and a ninth step of sending, by the data processing relay apparatus, the data processed by the data processing unit to the client apparatus (see col.5, lines 30-54. Cache 110 extracts embedded object 134 , that is the data processing control information to process the data and repeats these steps for each embedded object/document and then send s the data to the client for display).

**Regarding claim 21,** Crow discloses that the data processing method in accordance with claim 20, further comprising:

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a tenth step of receiving, by the data processing relay apparatus, an other data request from the client apparatus to the server apparatus (see at least col.4, lines 17-23 which discloses that the cache 111, that is the data processing relay apparatus receives many request) ;

a eleventh step of comparing data requested by the other data request with the data stored in the data processing relay apparatus and sending the other data request to the server in case that both data does not coincide by the data processing relay apparatus (see at least col.5, lines 18-29 and see Fig.2, steps 223 and 224 which show that on comparing if the data request does not coincide with the data stored in the cache memory the request is sent to the server "130") ;

a twelfth step of processing the data stored in the data processing relay apparatus in accordance with the data processing control information included in the stored extended data including the data by the data processing unit in case that both data coincide with each other in the eleventh step (see at least col.5, lines 14-16 and lines 30-46); and

a thirteenth step of sending, by the data processing relay apparatus, the data processed in the twelfth step to the client apparatus which has send the other data request as a response to the other data request (see col.5, lines 47-49).

**Regarding claims 22-23 and 29-30**, their limitations are closely parallel to the limitations of claims 20-21 and are analyzed and rejected on the basis of same rational as used in rejecting claims 20-21.

**Regarding claim 27**, Crow discloses that the data processing method in accordance with claim 22, further comprising a eleventh step of sending, by the server apparatus, the extended data including the data processing control information including the data processing

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instruction indicating to replace at least a part of the data requested by the data request with replacement data or insert insertion data into the data to the data processing relay apparatus, and a twelfth step of replacing, by the data processing unit, the part of the data with the replacement data or inserting the insertion data to the data in accordance with the data processing instruction in the data processing control information sent in the eleventh step (see at least Crow, col.4, lines 52-67. Regarding claim 27, as best understood by the examiner, the limitations are directed to updating the cached data at the data processing relay apparatus [cache 110] by the data processing control information received from the server and then the requested data can be searched in the updated data specific to a user. Crowe does disclose updating the cached data at the data processing relay apparatus [cache] via the extended data received from the server "130" (see at least col.4, lines 52-67).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.1. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crow in view of Rigney et al.; "Remote Authentication Dial In User Service (Radius)"; June 2000; received with the applicant's IDS filed on November 8, 2004, hereinafter referred to Rigney and further in view of Barish et al.; "World Wide Web Caching: Trends and Techniques"; May 2000; received with the applicant's IDS filed on November 8, 2004, hereinafter referred to Barish.

Regarding claim 24, Crow teaches a service system including server, client and data processing relay apparatus [proxy server] with capabilities as analyzed in claims 20-22 above. Crow is silent about authentication process where the data processing relay apparatus [cache 110] further comprises an apparatus/server for containing user or group authentication information, receiving user or group authentication information from client, and then processing the authentication process using the contained information and then only in response to the authentication process preparing and sending extended data to the user in response to the service request. However, in the same field of distributing information to clients from web servers and proxy servers/caches Rigney teaches the authentication process (see at least abstract, page 3, last paragraph-page 15, last paragraph). In view of Rigney, it would have been obvious to one of an ordinary skill in the art to have modified Crow to incorporate the authentication process between clients, cache and web servers because it will allow only registered/authorized users to access the web server/cache services and to prevent the fraudulent use. Crow in view of Rigney does not teach that the users could be in the form of groups. However, Barish, in the same field of endeavor, teaches that users could be in the form of groups (see at least page 180, the heading, "Adaptive Web Caching....." *Adaptive caching consists of multiple distributed caches.....In general, caches are organized into overlapping multicast groups which use voting and feedback techniques to estimate the usefulness of*



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*admitting or excluding members from that group .....If the virtual topologies are to be most flexible and have the highest chance of optimizing content access, administrative boundaries must be relaxed so that groups form naturally at proper points in the network").* In view of Barish, it would have been obvious to one of an ordinary skill in the art to have modified Crow in view of Rigney to incorporate the feature of authenticating the user (s) from a group because it helps to adapt and organize responses to those scenarios for which demand is very high, such as seeking information about the Olympics or any other sport event.

5.2 Claims 25-26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crow/Rigney/Barish in view of Landsman and further in view of Official Notice.

Regarding claims 25-26, their limitations are directed to the capabilities of the process as discussed in claims 20-21 and 24 for using software in the data processing relay apparatus [ cache] to charge users as per instructions from the server with customer specific instructions for the data requested and transmitting those charges to the client . Crow/Rigney/Barish, does not explicitly teach about charging user for the requested content but it is a well-known fact that the online users are charged or required to pay for the specific data that they request, such as requesting stock reports online or specific information from specific web servers. Therefore, examiner takes an Official Notice of the notoriously well-known fact of charging the online users for the information requested by them to be downloaded to their client apparatuses. Crow does not disclose that the cache controls the accounting function in charging the consumers. However, in the same field of endeavor, Landsman teaches the use of a cache in controlling the accounting function in charging the users (see at least col.13, lines 34-67 which discloses that the AdController controls the accounting function of each user). In view of Landsman and Official Notice, it would have been obvious to one of an ordinary skill in the art

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to have modified Crow/Rigney/Barish as applied to claim 24 to incorporate the capabilities of the process as discussed in claims 20-21 and 24 for using software in the data processing relay apparatus [ cache 110] because to charge users as per instructions form the server with customer specific instructions for the data requested and transmitting those charges to the client because to enable the system to charge the customers and realize payments from them and also that the charging is done as per the instructions of the server which owns and provides the requested content so that nothing is left unknown to the server of the consumer's activities at the cache (see Landsman col.7, line 54-col.8, line 40).

Regarding claim 28, as in claim 27, as best understood by the examiner, the limitations are directed to updating the cached data at the data processing relay apparatus [cache 110] by the data processing control information received from the server and then the requested data can be searched in the updated data stored in the cache-110 as analyzed in claim 27. Crowe does not disclose the limitations of searching data specific to a user or group of the user. However, the limitations of searching data specific to a user or group of the user has been already discussed and analyzed in claim 24 above in view of Rigney/Barish. Further, Landsman updates data depending on a specific user (see at least col.12, line 65-col.13, line 25 which clearly discloses that the data to be downloaded is updated based upon the data receiving browser [browser belongs to the user]. If the previously downloaded data in the user's browser cache is not superseded by an updated version the browser downloads the updated files from the server. Therefore, in view of Rigney/Barish/Landsman, it would have been obvious to one of an ordinary skill in the art to have modified Crow's feature of 9see claim 27 above; of updating the cached data at the data processing relay apparatus [cache ] by receiving updated extended data from the server and storing the same in the cache0 by

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incorporating the features of searching the updated data specific to a user or group of the user and authenticating them because it helps to adapt and organize responses to those scenarios for which demand is very high and be able to charge users as per instructions from the server with customer specific instructions for the data requested and transmitting those charges to the client and to enable the system to charge the customers and realize payments from them and also that the charging is done as per the instructions of the server which owns and provides the requested content so that nothing is left unknown to the server of the consumer's activities at the cache (see Landsman col.7, line 54-col.8, line 40 and the analysis in rejection of claims 25-26 above).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(i) US Patent 6,615,235 to Copeland et al. discloses use of Proxy caches to store data at sites remote from the server which is responsible for providing data to reduce network traffic and latency in providing data to the subscribers/users (see at least col.2, lines 33-38) and in case if data is not available in the cache then sending the request to a storage device containing that information, receiving said information from that storage device and sending it to client (see at least col.2, lines 47-63 and claims 1, 8, 16, 23, 29 and 30).

(ii) US Patent 6,964,052 to Korenshtein et al. discloses data caching such that a request sent from web client received by the web server is passed to a proxy/application server to process the request from the data stored in the proxy/application server (see at least col.1, lines 10-31). Korenshtein further teaches that if the requested data is not in the cache, the proxy


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server creates an object to execute the requested data and when the data is sent it is also saved in the cache (see at least col.2, lines 37-63).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh C. Garg whose telephone number is 571-272-6756. The examiner can normally be reached on M-F(8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Yogesh C Garg  
Primary Examiner  
Art Unit 3625

YCG  
1/26/2006